MNWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Current Trends

Premature Mortality in West Virginia, 1978-1982

From 1978 through 1982, there was an average yearly total of 113,552 years of potential life lost (YPLL) by West Virginians who died before the age of 65°. Unintentional injuries, which accounted for 23.6% of the total, headed the list of causes, and were followed by heart diseases (15.5%), malignant neoplasms (13.8%), suicides/homicides (8.3%), and congenital anomalies (5.5%) (Table 1). Heart diseases, which ranked second in West Virginia, accounted for 12% more YPLL than malignant neoplasms (17,642 as compared with 15,691); whereas, in 1980, heart diseases ranked third nationally and accounted for 8% fewer YPLL than malignant neoplasms (1).

Males accounted for 65.8% of the total YPLL. The annual rate of YPLL among males was 8,783/100,000, in contrast with 4,526/100,000 among females (rate ratio [RR] = 1.9). Males had higher rates of YPLL than females for each of the leading causes except diabetes (RR = 1.0). Unintentional injuries (RR = 3.5), suicides/homicides (RR = 3.3), chronic liver diseases (RR = 3.1), heart diseases (RR = 2.7), and pneumonia and influenza (P&I) (RR = 1.8) showed the greatest male/female rate ratios. The rate of YPLL among nonwhites, who constitute only 3.8% of persons under 65 years of age in West Virginia, was 9,141/100,000, in contrast with 6,524/100,000 among whites (RR = 1.4).

Crude county-specific YPLL rates ranged from 4,124 to 10,678/100,000. In an analysis of the distribution of the YPLL rate, the state's 55 counties were ranked by individual YPLL rates and were then aggregated into population quartiles based on the percentage of the population that was under 65 years of age. The 19 counties with the highest YPLL rate contained 25.1% of the state's population under 65 years of age and constituted the upper population quartile. The combined crude YPLL rate for these counties was 8,041/100,000. The 13 counties with the lowest rates contained 24.3% of the state's population under 65 years

Years of potential life lost before age 65 for persons dying in the 5-year period were derived from the number of deaths in each category (as reported by the Vital Registration Unit of the Health Statistics Center, Office of Epidemiology and Health Promotion, West Virginia Department of Health) multiplied by the difference between age 65 years and the age at which each individual death occurred. All infant deaths were considered to have occurred at 6 months of age.

Premature Mortality - Continued

TABLE 1. Years of potential life lost (YPLL) before age 65; crude rates and standardized YPLL rate ratio by cause of death, West Virginia, 1978-1982; and crude rates by cause of death, United States, 1980

Cause of Mortality (ninth revision ICD*)	YPLL	(%)	Crude YI per 10 W.V.		Standardized YPLL rate ratio§
All causes (TOTAL)	113,552	(100.0)	6,634	6,466	1.09
Unintentional injuries (E800-E949)	26,784	(23.6)	1,565	1,398	1.13
Heart diseases (390-398,402,404-429)	17,642	(15.5)	1,031	839	1.29
Malignant neoplasms (140-208)	15,691	(13.8)	917	912	0.99
Suicides/homicides (E950-E978)	9,386	(8.3)	548	693	0.94
Congenital anomalies (740-759)	6,198	(5.5)	362	374	0.92
Premature birth (765, 769)	4,167	(3.7)	243	277	0.92
Sudden infant death (798)	2,567	(2.3)	150	177	0.97
Cerebrovascular disease (430-438)	2,432	(2.1)	142	148	1.07
Chronic liver diseases and cirrhosis					
(571)	2,088	(1.8)	122	148	1.05
Pneumonia and influenza (480-487)	1,649	(1.5)	96	98	1.07
Chronic obstructive pulmonary diseases and allied conditions					
(490-496)	1,314	(1.2)	76	56	1.39
Diabetes mellitus (250)	1,082	(1.0)	63	56	1.29

^{*}International Classification of Diseases.

[†]Based on 1980 Mortality Statistics for the United States.

[§]West Virginia YPLL rate, adjusted by age, sex, and race (white/nonwhite) to 1980 U.S. population distribution/U.S. YPLL rate.

Premature Mortality - Continued

of age and constituted the lower population quartile. These counties had a combined crude YPLL rate of 5,371/100,000. The remaining 23 counties contained 49.4% of the state's population under 65 years of age and constituted the two intermediate population quartiles; their combined crude YPLL rate was 6,543/100,000. Per capita income in the upper quartile counties was less (\$5,376) than in the lower quartile counties and in the combined intermediate quartile counties (\$6,339 and \$6,422, respectively). Eighty-four percent of the population the upper quartile were rural inhabitants; whereas, the lower and combined intermediate quartiles had 61% and 55% rural inhabitants respectively (Bureau of the Census, U.S. Department of Commerce, 1980 census of population [public use tapes]).

Standardized to the 1980 age, sex, and racial distribution of the United States, rates of YPLL in West Virginia were substantially above the national level for all causes combined (9%) and for 7 of the 12 leading causes: unintentional injuries (13%), heart diseases (29%), cerebrovascular diseases (7%), chronic liver diseases (5%), P&I (7%), chronic obstructive pulmonary diseases (COPD) (39%), and diabetes (29%) (Table 1). The standardized rate for all causes combined in the upper quartile alone was 32% above the national rate. In the intermediate quartiles, the rate was 6% higher than the national rate, and, in the lower quartile, it was 11% lower.

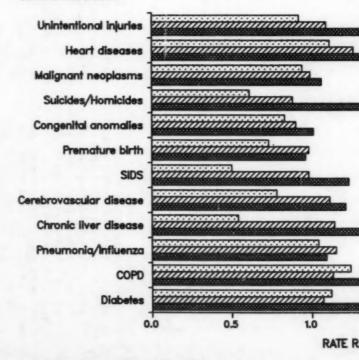
Standardized cause-specific YPLL rates were generally highest in the upper quartile and lowest in the lower quartile. As shown in Figure 1, these rates in the upper quartile were greater than the corresponding national rates for all leading causes except congenital anomalies and premature birth. YPLL rates in the lower quartile exceeded the national rates for heart diseases (11%), P&I (4%), COPD (24%), and diabetes (12%). The excess/deficit pattern observed for the intermediate quartiles was similar to that for the state as a whole.

Reported by R Baron, Acting State Epidemiologist, R Hopkins, E Thoenen, L Haddy, A Holmes, T Leonard, C Bailey, Office of Epidemiology and Health Promotion, D Heydinger, State Health Director, West Virginia Dept of Health; Div of Field Svcs, Epidemiology Program Office, CDC.

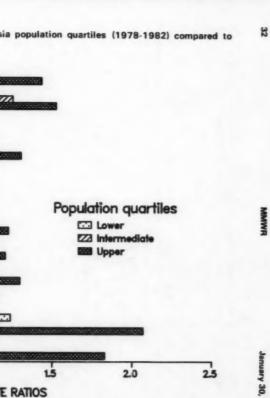
Editorial Note: YPLL has become an important means of quantifying premature mortality at the national level (2). The West Virginia Department of Health has prepared these analyses in order to provide statewide and county-specific reference levels for prioritizing health promotion and disease prevention strategies, for identifying counties with the greatest needs, and for tracking future progress.

In light of the national objective to reduce premature mortality by 1990 (3), YPLL rates that are above the national level for all causes of premature mortality combined and that are substantially higher that the national rates for 7 of the 12 leading causes represent an excessive public health burden in West Virginia. Sixty-one percent of West Virginians under the age of 65 live in counties where the crude rate for all causes combined is higher than the national rate. Standardized county-specific rates would have revealed an even greater proportion of the state's population living in counties with rates above the national level, since nonwhites, whose YPLL rates are considerably higher than those of whites, are underrepresented in West Virginia. The populations of most counties, however, are too small for meaningful county-to-county comparisons of directly adjusted rates or even of cause-specific crude rates. Aggregating counties into population quartiles emphasized the magnitude of premature mortality in 19 of the state's 55 counties. Moreover, excesses shown for certain cause-specific YPLL rates among counties constituting the lower quartile underscore how pervasive premature deaths from diabetes and cardiorespiratory conditions are throughout West Virginia.

FIGURE 1. Standardized, cause-specific YPLL ratios — West Virginia p United States (1980)



^{*}to age, race, and sex distribution of 1980 U.S. population





Premature Mortality - Continued

Measures to reduce premature mortality will entail substantial behavioral, lifestyle, and environmental changes that require committed community and local health department efforts. By identifying individual counties that have high overall rates of YPLL or that belong to population groups with high rates from specific causes, the data can be used to direct and encourage such efforts. While environmental, occupational, and genetic factors also contribute to premature mortality, most causes are linked to one or more modifiable behaviors currently under surveillance in West Virginia: cigarette smoking, sedentary lifestyle, overeating, failure to control high blood pressure, nonuse of seat belts, and alcohol abuse (4). For each of the first five, West Virginia has one of the highest prevalence rates among states that participated in the 1984 and 1985 Behavioral Risk-Factor Surveillance programs (5,6). For alcohol abuse, West Virginia has one of the lower prevalence rates. The West Virginia Department of Health, in support of the 1990 Objectives for the Nation (3), is developing and encouraging programs to reduce these behaviors and lifestyles.

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The group of counties with the highest rates of YPLL are the most rural and socioeconomically underpriviledged in the state, and, within these counties, rates for 10 of the 12 leading causes of premature death exceeded the national rates. To the extent that deaths from certain preexisting conditions may be postponed, the findings also raise the question of how much YPLL could be reduced by improved access and utilization of primary and secondary treatment facilities. Although prevention of the underlying conditions and their risk factors will continue to be the ultimate goal, the answer to this question may have important implications regarding allocation of funds for treatment centers and emergency medical services in West Virginia.

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- 6. CDC. Behavioral risk-factor surveillance in selected states, 1985. MMWR 1986;35:441-4.

Erratum: Vol. 36, No. 2

p. 28 The title of Figure I should read: "Reported measles cases — United States, weeks 51-53, 1986, and week 1, 1987."

Topics in Minority Health

Childbearing Patterns Among Puerto Rican Hispanics in New York City and Puerto Rico

Hispanics are the second largest minority in the United States. In 1980, the two million Puerto Ricans in the continental United States constituted the second largest U.S. Hispanic group. This group of Hispanics has traditionally concentrated in New York City (NYC). There were also more than three million Puerto Ricans residing in Puerto Rico in 1980. In order to study the childbearing patterns of these two groups of Puerto Ricans, vital statistics for NYC residents for the period 1978 through 1982 and for residents of Puerto Rico in 1980 were used*.

TABLE I. Summary-cases specified notifiable diseases, United States

		3rd Week Endi	ng	Cumul	ative, 3rd Wee	k Ending
Disease	Jan. 24, 1987	Jan. 18, 1986	Median 1982-1986	Jan. 24, 1987	Jan. 18, 1986	Median 1982-1986
Acquired Immunodeficiency Syndrome (AIDS)	44	151	N	552	644	N
Aseptic meningitis	66	58	91	252	218	264
Encephalitis: Primary (arthropod-borne						
& unspec)	10	14	16	36	47	44
Post-infectious	1	-	1	1	1	4
Gonorrhea: Civilian	16,641	17,706	17,706	51,470	44,022	48,058
Military	351	220	349	1.061	678	1,255
Hepatitis: Type A	383	500	383	1.036	1.074	1,011
Type B	342	481	448	1,030	1.173	1,116
Non A. Non B	42	53	N	142	160	94
Unspecified	62	78	102	157	217	224
Legionellosis	8	7	H	34	26	N
Leprosy	1 4	A	4	13	17	13
Malaria	2	16	14	32	31	31
Measles: Total*	16	11	9	59	44	25
Indigenous	12	10	N	52	41	N
imported	4	10	N	7	3	N
Meningococcal infections: Total		57	57	155	142	142
Civilian	42 42	57	57	155	142	142
Mistary	42	97	97	100	144	1-46
Mumps	257	47	59	440	124	180
Pertussis	20	39	17	74	97	69
Rubella (German messles)	16	2	- 5	20	10	23
Syphilis (Primary & Secondary): Civilian	557	475	591	1.653	1,137	1,480
Military	557	4/5	591	5	9	12
Toxic Shock syndrome	3	3	M	0	13	N
Tuberculoses		202	310	788	585	806
Tularemu	234	252	310	/06	000	800
Typhoid fever	2	1	-	9		17
Typhus fever, tick-borns (RMSF)	5	1	4	9		17
Rabies, animal	46	79	79	155	211	211
	46	79	1.9	100	211	4.1

TABLE II. Notifiable diseases of low frequency, United States

	Cum 1987		Cum 1987
Anthrax Botulism Foodborne Infant (Calif. 2) Other Bruceflosie Cholers Congenital rubella syndrome Congenital syphilis, ages 1 year Diphtheria		Leptospirosis (Mo. 1) Plague Poliomyelitis, Peralytic Psittacosis Gows 1, Calif. 2, Aleska 1) Rabies, human Tetanus (Fis. 1) Trichinosis (Mass. 1) Typhus fever, fisa-borns (endemic, murinel (N.Y. City 1)	7

^{*}Four bit the TB reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally in

[&]quot;The Office of Epidemiologic Surveillance and Research, New York City Department of Health, provided computer tapes of birth and linked birth-death certificates for the years analyzed. The Vital Statistics Cooperative Program (now the Office of Planning, Evaluations and Reports), Commonwealth of Puerto Rico Department of Health, provided similar data. The figures reported here may not be exactly comparable to previously published vital statistics reports because of differences in the definitions of ethnic and racial groups.

(Continued on page 39)

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 24, 1987 and January 18, 1986 (3rd Week)

	AIDS	Aseptic Menin-	Encep	shalitis	Gono	rrhea	H	epatitis (V	irall, by typ		Legionei-	
Reporting Area	AIUS	gitis	Primary	Post-in- fectious	(Civi	lian)	. A	B	NA,NB	Unspeci- fied	losis	Leprosy
	Cum 1987	1987	Cum 1987	Cum 1987	Cum 1987	Cum 1986	1987	1987	1987	1987	1987	Cum 1987
UNITED STATES	552	66	36	1	51,470	44,022	383	342	42	62	8	13
NEW ENGLAND	44	2	1	1	1,670	896	2	24	2	5	1	1
Maine N H	2				59 20	50			-		-	
Vt			1		12	22		2	*		*	
Mass	34	1			568	379	2	20	2	5	1	1
R I Conn	5	i	-	1	122 889	70	-	2				
						367					*	
MID ATLANTIC Upstate N Y	46	5 5	7 2		9,103 795	8.275 634	17	30	3	7	*	*
N Y City	2		3		5,594	5,415	12	11	1	6		-
NJ	42	*	-		847	676	4	6	2			-
Pa			2	*	1,867	1,550						*
EN CENTRAL	78	6	15	-	5,312	6,702	9	13	3	1	2	
Ohio	9	6	12	*	2.024	2,008	9	13	3	1	2	*
ind m	43			-	366 630	794 1,232						
Mich	15		3		1,975	1,813		-				
Wis	11				317	855						
WN CENTRAL	6	15	1		1,893	2,085	10	8	-			
Minn	3	10			353	372	2		2	2	1	1
lowa		1			198	236	ī	3		2	1	
Mo N Dak		3	*		1,016	906		2	1.		*	
S Dak		1			12 48	23 40	i		*	*	*	
Nebr	3	6	1		33	112	4	2	1			
Kans		4			233	396	2	1	-			
S ATLANTIC	154		5		13,724	8,672	11	67	7	11		
Del	6	-	1	-	165	188	2	3				
Md D.C	16	1	*	*	1,228 864	1,171	2	10	1	1	*	
Va	- 9		1	-	1,225	1,015	1	11	4	7		
W Va			2	*	72	131		-		1		
NC	8 2		1	*	2,357	1,480	i	14	1	2		
S C Ga	24	4			1,714	1,186	2	9	1	- 1		
Fia	89	3		*	4,022	2,664	3	11				
ES CENTRAL	6	4			3,708	3,469	4	32			1	
Ky				*	349	370	-	9		2		
Tenn	3	3			1.226	1,410	-	10		3	1	*
Ala Miss	3	1			1,255	810	2 2	7 6	:	i		
						-						
WS CENTRAL	22	3	2		6,751	5,796	7	8	2	3		2
La	13	1	-		687 710	504 953	1	6	:			
Okla	5	1	1		582	707	1	2		1		
Tex	1	1	1		4,772	3,632	5	*	2	2		2
MOUNTAIN	31	3	4		1,293	1,401	55	33	2	5	1	
Mont				*	26	41	1	1		-		
Idaho Wyo	1			*	30 14	11 28	1	1	i			
Colo	17				303	389	2	A		2		
N Mex	6		1		128	151	8	13		1		
Anz	2	3	3		418	476	36	8	*	2	1	
Utah	4			-	53 321	241	7	5	1		-	

PACIFIC Wash	165	20	1		8,016	6,726 455	268	127	21	22	2	10
Oreg	3		*		318	220	50	21	2			
Calif	143	18	1		7,332	5,810	172	85	16	21	2	8
Alaska Hawan	7	2			170	148	2	1				2
110 M S 11						-	-					-
Guam		U		*	110	100	U	U	U	U	U	
PR					20	8					-	-
Pac Trust Terr		U			2		U	U	U	U	U	
Amer Samoa		U		*	4		U	U	U	U	U	

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 24, 1987 and January 18, 1986 (3rd Week)

			Mea	sles (Rul	beola)		Menin-				_	_	_		
Reporting Area	Malana	Indig	enous	lmpo	rted *	Total	gococcal Infections	Mur	трв		Pertussis			Rubella	
	Cum 1987	1987	Cum 1987	1987	Cum 1987	Cum 1986	Cum 1987	1987	Cum 1987	1987	Cum 1987	Cum 1986	1987	Cum 1987	Cum 1980
UNITED STATES	32	12	52	4	7	44	155	257	440	20	74	97	16	20	10
NEW ENGLAND Maine	1			4	6		15	3	3	1	1	7	10	20	10
NH						*	:	-		*		1			
Vt				41	5		4	3	3	1	1	4	-		
Mass	1	*		*	1		6	-		-		2			
Conn	-						3			*	-				
MID ATLANTIC Upstate N Y		10	10		1	5	13	7	14	4	11	20		1	2
NY City			-			3	12	1	3	3	9	14	*		1
N.J. Pii	-	10	10		1				2		*			-	1
		10	10	٠	*		*	6	9	1	2	6	*		
EN CENTRAL Ohio	1	*	19			7	25	152	296		8	27	1	1	1
Ind				-			13		4		7	7	*	*	
Mich		*			-	6		152	232			3	-		,
Wis	-	*	19		-	1	12		56		1	1	1	1	
WN CENTRAL									-		-	8			1
Minn				-		22	9 2	11	27	3	12	11	*		
lows							2	6	14		2	6	-	*	
Mo N Dak		*	*	-		*	2		1	3	6				
S Dak									:			1			
Nebr									3			*		*	
Kans		*	*		-	22	3	-	4	-	4	2	-		-
S ATLANTIC	2					*	25	4	6		16	11			
Md	*	*	*	*		*				-					
DC							4	1	2	*	*	4	*		
Va	2	*		*		-	2			5	5	2	-	*	
W Va	*	*				*	*		1		1				
SC		-					3 4	1	1	3	9	3			,
Ga				*			6	1	1		1	1	-		
la	*	*	-	*	-	*	6	1	1	-		1			
S CENTRAL	1			*			10	68	73		1	4		2	
(y lenn		*		-			1	20	22			1		2	1
Afa							4	48	51	-	*	1		-	
Aiss	1	*		*		-	1	-			1	2	2		
N'S CENTRAL	1						7								
Ark		*				-			2					*	
a Okla	*	*	*	*			1.					-			
ex	1		-	-	-	-	4 2	N	N 2	-		*		*	
MOUNTAIN										-		-		*	*
Aont						1	6	4	5		3	7		1	
daho	*		*				*			-		2			*
Vyo	*			*	*		*	*	-		2				-
Mex					-	1	1	N	1 N	*	i	2	*		*
leig			*	*		-	4	4	4	-		3			
lteh lev		*			*		i	*			*	*		1	-
ACIFIC	**											*			*
Wash:	26	2	23	*		9	45	8	14	4	22	10	16		-
ireg		*	i		-		14	1	3	*	2	5	15	16	6
alif	26	2	22			9	24	7	N	1	6	*		1	
laska lawan					*		1		10	3	13	5	14	14	6
uam			,				*	*	1	*	1		1	1	-
R		U		U	1			U	,	U			U		
1	*								1	-	1	1	*	*	
nc Trust Terr mer Samoa		U	*	U				U		Ü	*	- :	4.5	*	
- Jennos		U		U	*		*	Ü		ŭ	-		U	*	

*For measles only, imported cases includes both out-of-state and international importations.

N Not notifiable U Unavariable International Qui-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending January 24, 1987 and January 18, 1986 (3rd Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tubero	culosis	Tule- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies Animal
	Cum 1987	Cum 1986	1987	Cum 1987	Cum 1986	Cum 1987	Cum 1987	Cum 1987	Cum 1987
UNITED STATES	1,653	1.137	1	788	585	5	9	5	155
NEW ENGLAND	23	38		13	21		2		
Maine	*	1			6		-		
NH Vt	1	1 2		1	2				
Mass	16	20		3	1 4	-	:		*
RI	*	1			-	-	2		
Conn	7	13		9	8			2	
MID ATLANTIC	197	196		153	79				25
Upstate N Y N Y City	127	136	-	41 82	24	-		*	3
NJ	25	34		22	33	-			
Pa	42	15	-	8	22			-	22
EN CENTRAL	22	37							
Ohio	1	4		125	94	1	2	1	3
Ind	1	18		1	9 5	1	1	1	*
MI .	17	4		66	58				
Mich Wis	1	4		33	16		1		
	2	7		3	6				3
WN CENTRAL		16	1	28	7	2			23
Minn	4	2		6	1				7
Mo	4	3		5	:	2			7
N Dak		2		14	6			*	1
S Dak		-		2					5
Nebr	*	-		-	-	-			
Kans	*		9		*	*		-	3
S ATLANTIC	505	249		141	142		2		
Del Md	. 5	1					2	181	41
DC	32	27		7	9	-			10
Va	16	16 27		6	10				3
W Va		1		16	4				15
N C S C	42	28		22	26	-	1		3
Ga	47 96	50		28	29	-			2
Fla	26:	99	:	50	11 52		:		8
ES CENTRAL	114	79		98			1		
Ky		4		8	72 15		*	1	10
Tenn	6	48		-	14				7
Ala Miss	4'	27	*	38	43			-	3
		*	*	52		*		1	
W S CENTRAL		253		25	14	1		3	30
La		10		1	*			3	10
Okia	12	47		-	6	-			1
Tex	195	191		16	i	1	*	3	
MOUNTAIN	13	32		6	12	1			19
Mont					12	1			9
daho Wyo	1	1		2			-		3
Colo	6	18		*		*			4
N Mex		1.0	2	i	1 2		*		
Ariz	6	11		1	5	1			2
Utah Nev		2						-	2
				2	4	*		*	
PACIFIC	523	237		199	144		3		14
Wash Oreg	12	12		9	12				14
Calif	510	214		162	123		:		
Alaska		-		7	123		3		13
Hawan	1	5		15	4				1
Guam		1	U						
PR	34	34		8	11				4
			Ü		*	*			
ac Trust Terr									

TABLE IV. Deaths in 121 U.S. cities." week ending January 24, 1987 (3rd Week)

		All Causes, By Age (Years)						All Causes, By Age (Yeers)							
Reporting Area	All Ages	>65	45-84	25-44	1-24	<1	Pål** Total	Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	P&I** Tota
NEW ENGLAND	681	503	111	37	9	21	81	S ATLANTIC	1,382	912	275	122	31	40	72
Roston, Mess	197	127	40	19	5	6	38	Atlanta, Ga	177	107	36	- 22	5	7	4
Bridgeport, Conn	53	45	6			2	4	Baltimore, Md	300	199	58	26	8	9	18
Cambridge, Mass.	27	22	5	-	*		5	Charlotte, N.C.	49	27	17	4		1	3
Fall River, Mass	29 53	23	5	1	-			Jacksonville, Fla	109	69	25	10	1	2	4
Hartford, Conn	23	32	14	3	1	3	-	Miami, Fla Norfolk, Va	129	86	25	12	4 2	2	4
Lowell, Mass Lynn, Mass	16	15	4	2			4	Richmond, Va	101	69	19	7	3	6	2
New Bedford, Mass		21	2	1		-		Savannah, Ga	68	45	16	6	1	3	
New Haven, Conn.		35	9	5		2	4	St Petersburg, Fla	128	102	19	3	2	2	1
Providence, R1	47	31	9	2	1	4	3	Tampa, Fla	83	59	12		1	3	1
Somerville, Mess		7	1	*		-	1	Washington, D.C. §	148	85	36	18	4	5	- 7
Springfield, Mass	54	41		1	1	3	7	Wilmington, Del	31	24	4	3			
Waterbury, Conn	37	29	6	1	1		3		000	000	000	-	40	-	
Worcester, Mass.	62	54	4	3	*	1	11	ES CENTRAL	968	625	206	67	41	29	66
AND ATLANTIC	2,902	1,971	590	235	51	55	162	Birmingham, Ala	136	87 49	29	16	3	1	-
	47	32	6	3	2	4	102	Chattanooga, Tenn Knoxville, Tenn	90	62	14	9	2	3	
Albany, N Y Allentown, Pa	20	16	4			-	1	Louisville, Ky	140	87	36	4	9	4	
Buffalo N Y	148	99	31	10	1	7	14	Memphis, Tenn	328	208	77	21	10	12	
Camden, N.J.	30	19	6	2	3		1	Mobile, Ala	33	23	4		3	3	
Elizabeth, N.J.	21	14	5	2			*	Montgomery, Ala	34	22	7	1	3	1	1
Erie, Pa 1	41	28	12			1	2	Nashville, Tenn	140	87	29	12		4	- 1
Jersey City, N.J.	63	35	20	5	1	2	1								
NY City, NY §	1,542	1,018	307	164	30	23	70	WS CENTRAL	1,426	901	303		61	49	
Newark, N.J.	79	37	33	7	2	-	*	Austin, Tex	67	49	13		1	1	
Paterson, N J	390	15 275	79	21	7	1	27	Baton Rouge, La	40	29	1		1		
Philadelphia, Pa	390	60	16	4	2	8	27	Corpus Christi, Tex	51	40			1	1	
Pittsburgh, Pa 1 Reading, Pa	41	35	5	1	4	-	3	Dallas, Tex El Paso, Tex	220	120	57		15	5	
Rochester, N Y	120	102	10	4	2	2	18	Fort Worth, Tex	109	78	17		2	2	
Schenectady, N V	26	23	2	1		-	1	Houston, Tex	321	188	75		18	16	
Scranton, Pa 1	36	27	8			1	5	Little Rock, Ark	81	50	20		5	1	
Syracuse, N Y	84	61	17	5		1	6	New Orleans, La	61	36	-		1	1	
Trenton, N J	31	16	10	4	-	*	1	San Antonio, Tex	206	135	41	15		7	2
Utica, NY	29	22	5	2	*		1	Shreveport, La	70	42	16	6	1	5	5
Yonkers, N Y	47	37	9			1	6	Tulsa, Okla	106	71	20		5	3	
EN CENTRAL	2,364	1,588	497	146	46	87	125	MOUNTAIN	810	507	172				
Akron, Ohio	63	37	23	1	1	1	*	Albuquerque, N Me		60	30				2
Canton, Ohio	42	27	12	3			5	Colo Springs, Colo	59	35	16				
Chicago, III §	564	362	125	45	10	22	16	Denver, Colo	122	67	25			13	
Cincinnati, Ohio	158	113	34		2	5	20	Las Vegas, Nev Ogden, Utah	31	21	3.		1	2	
Cleveland, Ohio Columbus, Ohio	142	92 114	31	12	3 5	9	4	Phoenix, Ariz	172	114	3				
Dayton, Ohio	119	84	24	5	3	3		Pueblo, Colo	27	23			1		
Detroit, Mich	241	147	50	27	7	10	10	Salt Lake City, Utah		29	- 1			1	3
Evansville, Ind	46	33	10	2		1	4	Tucson, Ariz	119	89	23	2 2	1		5
Fort Wayne, Ind.	70	52	11	4	1	2	6								
Gary, Ind. §	17	12	4	1			*	PACIFIC	1,968	1,343				41	0 10
Grand Rapids, Mic		38	11	2		3	8	Berkeley, Calif	17	10		9 1	3		3 1
Indianapolis, Ind.	154	109	32	3	4	6	1	Fresno, Calif	37	24					3
Madison, Wis.	41	22	11	4	1	3	3	Glendale, Calif	82	52					3
Milwaukee, Wis	161	112	29		4	8	5	Honolulu, Hawan	55	37	1				1
Peoria, III	45	32		3		2	5	Long Beach, Calif Los Angeles, Calif	562	370					
Rockford, III. South Bend, Ind.	49	41	12	4	1	1	7	Oakland, Calif §	80	55					2
Toledo, Ohio	119	83	19	9	3	5		Pasadena, Calif	34	26		4 .	. 1	1	3
Youngstown, Ohi		36	14	1	1	1	1	Portland, Oreg.	105	76					4
WN CENTRAL	913	674	150	45	9	35	63	Sacramento, Calif San Diego, Calif	172	113					5
Des Moines, Iowa		55	18	5	-	1	6	San Francisco, Cali		104					2
Duluth, Minn	39	31	6	1	-	1		San Jose, Calif	. 178	138	2	9 5			3
Kansas City, Kans		33	7	1	2	1	3	Seattle, Wash	128	85	2			. !	5
Kansas City, Mo.	149	108	22	9	-	10		Spokane, Wash	63	51		8 1	1		3
Lincoln, Nebr.	34	27	6			1	5	Tacoma, Wash	62	43	1	0 3	4		2
Minneapolis, Minn	195	148	27	10	2	8									
Omaha, Nebr	97	67	17	5	2		6	TOTAL	13,414	11 9,024	2.67	4 981	319	40	4 8
St Louis, Mo	163	123	25	11	*	- 4	6								
St. Paul, Minn	61	46	10	2	1	2									
Wichita, Kans.	52	36	12	1	2	1		1							

^{*}Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more, A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. *Pineumonia and influenza.*

*Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks. **

Total encludes unknown ages.

*Data not available: Figures are estimates based on average of past 4 weeks.**

Childbearing Patterns - Continued

Three groups of Puerto Rican infants were examined: infants born in Puerto Rico (islanders, N=72,085), first-generation Puerto Rican infants born in NYC to Puerto Rico-born mothers (N=48,794), and second- or higher-generation Puerto Rican infants born in NYC to New Yorkborn Puerto Rican mothers (N=36,013). Single births in these three groups are compared with single births for non-Puerto Rican Hispanics (N=57,871), non-Hispanic blacks, and non-Hispanic whites in NYC. Only births occurring during the period 1979 through 1981 are included for blacks (N=96,352) and whites (N=96,780). An infant's race was determined according to the standard National Center for Health Statistics algorithm (1) for births of non-Hispanic descent. An infant's ethnicity was determined by referring to the self-reported ethnic identification of the mother at the time of birth registration. Births to Hispanics of non-Puerto Rican descent comprised 38% of all Hispanic births in NYC during the period 1978 through 1982; of these births, 92.4% were Central or South American, 4.4% were Cuban, and 3.4% were Mexican. The variables examined were maternal age, education, parity and marital status at the time of delivery, the trimester in which prenatal care began, and Medicaid coverage of the birth (Table 2).

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The proportion of infants with mothers < 18 years of age was highest among second- or higher-generation Puerto Ricans delivered in NYC (15.5%). This was twice the proportion for both islanders (7.6%) and first-generation Puerto Rican births in NYC (6.9%). The proportion of second- or higher-generation infants with mothers < 18 years of age was 10 times higher than the proportion for whites (1.5%) and 1.7 times higher than the proportion for blacks (8.9%). Otherwise, first-generation and second- or higher-generation Puerto Rican births had a similar maternal risk profile except for parity.

Births of Puerto Rican descent in NYC differed markedly from births in Puerto Rico. In general, Puerto Rican mothers delivering in NYC were less educated, had less access to early prenatal care, and had more than twice the proportion of out-of-wedlock births as mothers delivering in Puerto Rico. Women in consensual unions in Puerto Rico were considered as unmarried in this analysis.

The maternal risk profiles for Puerto Rican and non-Puerto Rican Hispanic infants in NYC also differed markedly. Non-Puerto Rican Hispanic mothers were better educated, were less likely to give birth in unmarried circumstances or at younger ages, and had less Medicaid coverage than Puerto Ricans in NYC. Compared with whites in NYC, however, non-Puerto Rican Hispanics had a much higher risk profile. In general, Puerto Rican births had a maternal risk profile closer to blacks than to other Hispanics in NYC.

Reported by Bureau of Maternity Svcs and Family Planning, New York City Dept of Health; Office of Planning, Evaluations and Reports, Commonwealth of Puerto Rico Dept of Health; Research and Statistics Br, Pregnancy Epidemiology Br, Div of Reproductive Health, Center for Health Promotion and Education, CDC.

Editorial Note: Previous studies have shown that Hispanic women born in the United States have a higher pregnancy risk profile than Hispanic women born in their country of origin (2,3). U.S.-born Hispanic women tend to be younger and more likely to be unmarried than foreign- or Puerto Rico-born women delivering in the continental United States. This report extends the comparison further by examining births of infants of Puerto Rican descent in NYC to births in Puerto Rico for the same period.

TABLE 2. Maternal risk factors for singleton, live-birth infants with kr and New York City, 1978-1982

Maternal Risk Factor	Puerto Ricans (Islanders) PR, 1980 N=72,085	Puerto Ricans 1st Generation NYC, 1978-82 N=49,336	Puerto Ricans 2nd Generation NYC, 1978-82 N=36,362	
			Perc	31
Age				
< 18 years	7.7	6.9	15.5	
≥35	6.7	9.7	0.7	
Education				
< 12 years	45.5	58.2	54.1	
Unmarried	20.9	55.8	58.9	
Parity				
1 child	34.2	31.2	52.8	
5 or more children	7.8	9.0	1.9	
Beginning month of prenatal care				
1st trimester	60.6	32.7	31.7	
2nd trimester	30.0	37.0	37.0	
3rd trimester	4.6	12.3	13.7	
None	0.9	13.5	13.4	
Unknown	3.9	4.5	4.2	
Medicaid coverage				
of birth	58.4	57.9	56.3	

^{°227-8,165} grams.

[†]Public hospital births.

_					
	Hispanics	Blacks	Whites		
n 2	(Non-Puerto Rican) NYC, 1978-82	(Non-Hispanic) NYC, 1979-81	(Non-Hispanic)		
	N=57,871	N=96,352	NYC, 1979-81 N=96,780		
erc	entages				
	3.0	8.9	1.5		
	9.5	7.2	8.5		
	46.0	33.6	13.4		
	31.4	61.8	9.1		
	43.3	44.1	47.2		
	4.1	6.4	4.6		
	33.4	34.1	66.9		
	39.9	37.8	22.9		
	14.8	13.4	6.1		
	8.9	11.1	1.9		
	3.0	3.6	2.2		
	36.1	48.3	11.0		

h known birthweight*, by race/ethnicity — Puerto Rico



Childbearing Patterns - Continued

Consistent with previous findings (2), slight differences in maternal education and marital status are present between the two generations of Puerto Rican infants born in NYC. The high proportion of < 18-year-old mothers among second- or higher-generation Puerto Ricans in NYC is, however, quite remarkable. Lack of improvement in social and economic status between first-generation Puerto Ricans and second- or higher-generation Puerto Ricans is suggested by the similar proportions of Medicaid coverage in both groups. Although age- and sex-specific census data on Puerto Ricans in NYC are not available by birthplace for calculating the corresponding fertility rates, it is unlikely that the difference found is explained by the age distributions of the groups involved.

The proportion of Puerto Rican infants born to unmarried mothers in NYC is similar to the proportion for blacks and is higher than the proportion for non-Puerto Rican Hispanics. This latter is higher than the ones previously reported in the literature for other Hispanics (2,3). Both generations of Puerto Ricans in NYC have over twice the rate of out-of-wedlock births as Puerto Rican islanders, whose rate is twice that of whites in NYC. The factors responsible for this disparity should be explored further.

The differences in access to early prenatal care services between Puerto Ricans in NYC and those in Puerto Rico are significant. Puerto Ricans in NYC have the highest rates for lack of prenatal care of all groups considered. There are no significant differences in the proportions of women with no data on prenatal care in Puerto Rico and NYC that might explain these findings (Table 2). Because women in Puerto Rico are more likely to receive prenatal care than those in NYC, the high proportion of infants of Puerto Rican descent in NYC whose mothers did not have any prenatal care may be due to social and economic factors rather than to personal health practices.

Although Hispanics are not a homogeneous group, current ethnic/racial classifications group all Hispanics together. The large difference noted here between Puerto Rican and non-Puerto Rican Hispanics suggests the inadequacy of the current classifications for epidemiologic research. Births of infants of Puerto Rican descent present a maternal risk profile quite different from other Hispanics in the United States.

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- Williams RL, Binkin NJ, Clingman EJ. Pregnancy outcomes among Spanish-surname women in California. Am J Public Health 1986;76:387-91.

Surveillance Summary

Viral Hepatitis - 1984

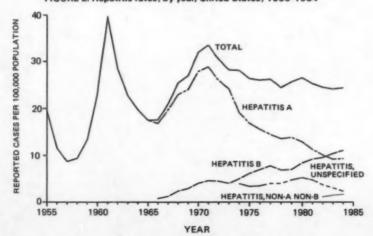
Information on viral hepatitis is obtained through two survaillance systems. Incidence data are collected from cases reported to the CDC National Morbidity Reporting System by each state and territory. The number of cases, age of patient, and date reported of each type of hepatitis as classified by physician's diagnosis appear in the Morbidity and Mortality Weekly Report (MMWR) and the MMWR Annual Summary. Serologic and epidemiologic data pertaining to risk factors of disease acquisition are obtained from the Viral Hepatitis Surveillance Program (VHSP), a totally separate voluntary reporting system operated by the Hepatitis Branch, Division of Viral Diseases, Center for Infectious Diseases, Centers for Disease Control.

Morbidity Trends Based on Cases Reported to the MMWR

Figure 1 shows the changes in incidence of reported cases of all hepatitis since 1955 and by type since 1966. In 1984, the reported incidence of hepatitis B surpassed that of hepatitis A for the second consecutive year. Of 57,557 cases of viral hepatitis reported to the *MMWR* in 1984, 38% were reported as hepatitis A; 45%, as hepatitis B; 7%, as hepatitis non-A, non-B; and 10%, as unspecified hepatitis. Virtually no change occurred in the reported incidence of hepatitis A, while there were slight increases in the reported incidence of hepatitis B and hepatitis non-A, non-B. Combined with a decline in the rate of unspecified hepatitis, these changes have resulted in a nearly constant overall rate of viral hepatitis.

In 1984, states in the west and southwest regions continued to report high rates of hepatitis A. Historically, the major contributing factors to these high rates have been transmission of hepatitis A in day care and sustained community-wide outbreaks due to person-to-person spread. Foodborne-associated outbreaks of hepatitis A often account for large year-to-year fluctuations in hepatitis A rates. The states with the highest rates of hepatitis B are clustered primarily on the east and west coasts as in previous years. Non-A, non-B hepatitis has been a

FIGURE 2. Hepatitis rates, by year, United States, 1955-1984



Viral Hepatitis - Continued

separate reportable disease category in the MMWR since 1982. The low reported rates for this disease are believed to be due to incomplete serologic testing and underreporting.

Persons in the 20- to 29-year age group continue to have the highest rates of both hepatitis A and hepatitis B. The risk of acquiring hepatitis A appears to have declined in persons of all age groups except those less than 15 years of age. Some of this decline may be due to increased use of available serologic tests which may have resulted in reclassification of the type of hepatitis occurring in older persons.

Although persons under 15 years of age still experience low rates of hepatitis B infection, the risk of acquiring this disease continues to increase for all other age groups. Persons in the 15- to 39-year age groups tend to be in the high-risk categories (i.e., health care workers, parenteral drug abusers, and homosexual men) for acquiring hepatitis B.

Viral Hepatitis Surveillance Program

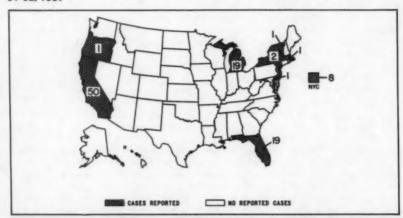
Since 1980, the VHSP has received reports on approximately half of the cases reported to the MMWR. CDC's ability to accurately analyze and interpret nationwide trends and patterns, identify high-risk groups, and determine mechanisms of transmission for each type of hepatitis depends on (1) the local medical community's utilization of the appropriate serologic tests to distinguish between the different types of hepatitis and (2) the voluntary cooperation of the state and local health departments in completing and submitting the VHSP forms. Non-A, non-B hepatitis is now a separate reportable disease category, and since this type of viral hepatitis remains a diagnosis of exclusion, serotesting is even more important. Differentiation of any of the types of viral hepatitis based on clinical or epidemiologic characteristics alone is no longer acceptable since there is considerable overlap between the different types of hepatitis with respect to these characteristics.

The number of cases reported to the VHSP was 24,613 in 1984, representing 43% of the cases reported to the *MMWR* in the same year and down from 47% in 1983. Reporting of cases to the VHSP is not consistent among states because, while many states reporting to the *MMWR* also report to the VHSP, many of the states do not. The percentage of agreement in reporting between the *MMWR* and the VHSP, however, is not necessarily a measure of the actual completeness of reporting from a particular state. Despite the difference in numbers, the cases reported to the VHSP are similar to those reported to the *MMWR* with respect to the relative frequencies of the different types of hepatitis as well as the age distribution of the cases.

While serologic tests for diagnosing hepatitis B, including hepatitis B surface antigen (HBsAg), have been available since the early 1970's, a laboratory test for IgM antibody to hepatitis A virus (IgM anti-HAV) has only been available since 1981. The use of these two serologic tests to distinguish between the different types of viral hepatitis has increased over the past 4 years. The tendency for physicians to use both tests has increased from 27% in 1981 to 64% in 1984, while the frequency with which HBsAg is used as the only serologic test has decreased from 43% to 19%.

Copies of the entire Hepatitis Surveillance Report Number 50 (issued March 1986) are available from the Hepatitis Branch, Division of Viral Diseases, Center for Infectious Diseases, Centers for Disease Control, Atlanta, Georgia 30333, telephone number (404) 321-2342.

FIGURE I. Reported measles cases — United States, weeks 52-53, 1986, and weeks 01-02, 1987



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tional basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, Morbidity and Mortality Weekly Report, Centers for Disease Control, Atlanta, Georgia 30333.

Director, Centers for Disease Control James O. Mason, M.D., Dr.P.H. Director, Epidemiology Program Office

Carl W. Tyler, Jr., M.D.

Editor

Michael B. Gregg, M.D.

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